



**Benjamin H. Venger, M.D., F.A.C.S.**  
**William D. Smith, M.D.**  
**John A. Anson, M.D., F.A.C.S.**  
**Derek A. Duke, M.D.**  
**Jason E. Garber, M.D.**  
**Michael E. Seiff, M.D.**  
**James S. Forage, M.D.**  
**Stuart S. Kaplan, M.D.**

# Western Neurosurgery Review

A newsletter for Pediatricians

Spring 2005

**Stuart S. Kaplan, M.D.**  
**Board Certified in Neurological Surgery**  
**Pediatric Neurosurgeon**



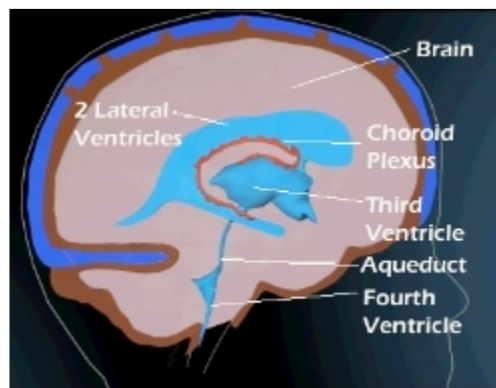
Dr. Stuart Kaplan has an extensive background in intracranial and spinal disorders. Through his research in neuronal ischemia Dr. Kaplan has been awarded several honors including the National Institutes of Health National Research Service Award and The Southern Neurosurgical Society Basic Science Resident Award. Dr. Kaplan's specialties include general intracranial and spinal neurosurgery as well as functional neurosurgery with subspecialization in medical refractory epilepsy. Dr. Kaplan also treats all aspects of pediatric neurosurgery. Dr. Kaplan completed a pediatric neurosurgical fellowship at St. Louis Children's Hospital in 2002. Dr. Kaplan is a graduate of Harvard Medical School in Boston with a Doctorate of Medicine. *More information about Dr. Stuart Kaplan is located on page 7.*

## Hydrocephalus in Children

Hydrocephalus is an abnormal accumulation of cerebrospinal fluid (CSF) within cavities called ventricles inside the brain. It can also be defined as inadequate absorption (Communicating) or circulation (Obstructive) of cerebrospinal fluid resulting in increased intracranial pressure. CSF is produced in the ventricles, circulates through the ventricular system and then is absorbed into the bloodstream. CSF has many important functions such as acting like a protective cushion against injury to the brain and spinal cord. CSF also contains nutrients and proteins which are necessary for the nourishment and normal function of the brain as well as being a carrier of waste products away from surrounding tissues.

Hydrocephalus occurs when there is an imbalance in the amount of CSF that is produced and the rate at which it is absorbed. When the CSF is not absorbed adequately, it enlarges the ventricles and creates more pressure inside the head. In my instances, hydrocephalus is a lifelong condition whereas the patient is treated and not fully cured.

Hydrocephalus can be present during one of two stages; it can exist at birth which is known as congenital or it can occur later in life (acquired) due to a variety of causes such as tumors, infection, hemorrhage, etc.



Ventricular Anatomy

Hydrocephalus exists in two forms; communicating and noncommunicating. Communicating (non-obstructive) is caused by inadequate absorption of CSF when the ventricular pathways are not obstructed. Noncommunicating (obstructive) is caused by blockage in the ventricular pathways through which the CSF flows.

Signs and symptoms consistent with a patient with hydrocephalus include headaches, nausea, vomiting, irritability, rapidly growing head circumference (crossing curves), a full anterior fontanel, and splayed sutures. Patients warrant a head CT or ultrasound to evaluate this further.

The most effective form of treatment for hydrocephalus is the surgical insertion of a shunt. This involves diverting CSF through a surgically implanted shunt. This shunt is a detour procedure that is made by placing a catheter in the ventricles in the interior of the brain. The fluid drainage is accomplished with a pressure-controlled valve, and usually the fluid is drained outside the brain into the abdominal cavity where it is reabsorbed along the belly wall. Shunts may require revision in the future.



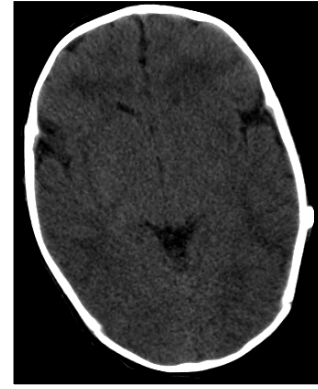
Ventricular Catheter

Despite the advances in shunt technology and surgical techniques, there are many cases in which shunts are ineffective. In some cases, a third ventriculostomy is preferable to a shunt. A third ventriculostomy (intracranial shunt) consists of a tiny perforation that is made in the floor of the third ventricle, which, in turn, allows movement of CSF out of the blocked ventricle and into the subarachnoid space. The objective of this procedure is to reduce pressure on the brain from excess fluid in the ventricle without having to use a shunt. Unlike "extracranial" shunts, which may require revisions, a third ventriculostomy is generally a one time procedure.



Before Shunt

Note the enlarged lateral and third ventricles (black) with transependymal CSF migration consistent with elevated intracranial pressure



After Shunt

The ventricles are normal in size

Hydrocephalus Statistics according to the Hydrocephalus Foundation:

- In the United States, a little over 1 in 1000 births are affected by hydrocephalus.
- Hydrocephalus is one of the most common “birth defects” and afflicts in excess of 10,000 babies each year.
- Studies by the World Health Organization show that 1 birth in every 2,000 result in hydrocephalus.
- There are 70,000 discharges a year from hospitals in the United States with a diagnosis of hydrocephalus.
- More than 50% of hydrocephalus cases are congenital.
- Over the past 25 years, death rates and intellectual disability associated with hydrocephalus have decreased dramatically due to improved treatments with shunts and treatment of shunt malfunction and infection.

## What's New?

Western Regional Center for Brain and Spine Surgery would like to announce the addition of two Physician Assistants, R. Monty Cary, PA-C, M.Ed and Patrick Davis, PA-C:



### **R. Monty Cary, PA-C, M.Ed**

Mr. Cary has been a physician assistant for over 30 years and has worked in General and Vascular Surgery, Occupational Medicine, Emergency Medicine and Clinical Administration. He is a 1975 graduate of the Alderson-Broaddus College Physician Assistant Program and a 1987 graduate of The Pennsylvania State University, Penn State, with a Master's Degree in Education and Health Education.

Mr. Cary has been active in both the clinical and educational aspect of the medical profession. After obtaining his Master's Degree from Pennsylvania State University, he held an Adjunct Faculty position at Penn State from 1987 to 1994 in the Department of Continuing Education and the Department of Health and Community Services at the Milton S. Hershey Medical Center. Since 1998 Mr. Cary has held an Adjunct Faculty position at the Community College of Southern Nevada in the Department of Health Information Technology and the Department of Biology.

Mr. Cary is a retired Major from the United States Air Force Guard and Reserve program. He has traveled world wide with medical units that were involved in humanitarian to combat missions. He last served with the 193rd Special Operations Wing, "The Most Active Guard Unit In The World".

Mr. Cary has been called upon to provide information to some of the most prestigious Law Firms in the United States. His current interest is in the field of Medical Technical Advisor to the film, movie and television industry.

Mr. Cary is our office based physician assistant and sees our post operative patients.



### **Patrick Davis, PA-C**

Mr. Davis has resided in Southern Nevada most of his life. His family moved to Las Vegas in the early 70's when he was a child. He graduated from High School in Boulder City and received an Associate Degree with Honors from the Community College of Southern Nevada.

Mr. Davis spent 16 years in the United States Naval Reserve as a Corpsman. He trained as a Surgical Technologist at California Paramedic and Technical College in Long Beach, CA. he became a Nationally Certified Surgical Technologist and has worked in the operating room first assisting in surgery.

Mr. Davis graduated from the University of Washington School of Medicine Physician Assistant training program in 2002. He practiced in an Orthopaedic practice before joining Western Regional Center for Brain and Spine Surgery.

Mr. Davis has spent the last two years involved in working with Spine injuries at the Level One Trauma Center at UMC.

Mr. Davis is a member of the American Academy of Physician Assistants, the Nevada Academy of Physician Assistants and currently sits on the board for the Allied Health Committee at UMC.

Mr. Davis is one of our hospital based Physician Assistants. He covers periodic night and weekend call with the neurosurgeons and occasionally sees post operative patients in the office.

## **HOSPITAL BASED PHYSICIAN ASSISTANTS**

### **Joseph A. DeLappi, PA-C**

Mr. DeLappi was born and raised in Scranton, Pennsylvania. He received a B.S. in Biology from the University of Scranton and then went on to receive a Bachelor of Science degree in Physician Assistant Studies from Pennsylvania College of Technology.

### **Michael B. Houtz, PA-C**

Mr. Houtz was born and raised in Cedar Rapids, Iowa. He graduated with a B.S.B.A. from the University of Missouri-Columbia and went on to receive his MBA in Finance from DePaul University. During the years that followed his acquisition of his MBA, Mr. Houtz attended Midwestern University and received a Bachelor of Medical Science in Physician Assistant Studies.

### **Douglas T. Young, PA-C, Ph.D.**

Mr. Young was born in North Kingston, Rhode Island and raised in Houston, Texas. He graduated with an Associate of Arts Degree from San Jacinto College and then received his B.S. from the University of Houston. He then went on to receive two degrees from the Western University of Health Sciences, his Physician Assistant and Master of Science Degree. From there he went on to receive his Doctor of Philosophy from Kennedy-Western University. Mr. Young is also an instructor of Human Pathophysiology at the Community College of Southern Nevada. Currently Mr. Young is a Doctoral student at Nova South Eastern University. Upon graduation he will receive his second Doctorate of Education Degree in Managerial Leadership.

## **New Online Referral Forms can expedite your referrals!**

- **New Online Referral Forms can expedite your referrals!** Go online to [www.BrainAndSpineOnLine.com](http://www.BrainAndSpineOnLine.com), click on the Referral Form button, fill out the online form, then click the submit button. The information will be sent directly to our Referral Specialists to immediately start processing your referral.

### **Visit our Website**

Please visit our newly updated website located at [www.BrainAndSpineOnLine.com](http://www.BrainAndSpineOnLine.com) to learn more about our practice.

On our website, you will find information regarding our practice including office hours and locations, information on how to schedule an appointment, new patient paperwork, contact and insurance information, office policies, and much more.

In addition, learn more about our physicians and medical staff, about neurosurgery, as well as many of the more common symptoms and conditions that our physicians treat.

# **Keeping In Touch**

At Western Regional Center for Brain and Spine Surgery we are constantly expanding to better serve the needs of our patients and referring physicians. While expansion allows us to see patients in a more timely manner and closer to their homes, we realize that keeping track of where we are can be a confusing proposition. For this reason, we have compiled a list of our office locations.

## Nevada Clinics

### **Las Vegas Main Office**

3061 S. Maryland Pkwy, #200

Phone: 702-737-1948

Toll Free: 800-334-0878

Fax: 702-737-7195

New Patients Referrals Fax: 702-735-1169

**New Patient Appointments for all physicians  
are scheduled through our main office on  
Maryland Parkway**

### **Henderson Main Office**

861 Coronado Ctr Dr, #200

Phone: 702-896-0940

All Faxes: 702-896-6173

### **MountainView**

Professional Med. Center

3150 N. Tenaya Way, #340

### **Spring Valley**

5495 S. Rainbow Blvd, #101A

### **Laughlin**

UMC QuickCare

150 Bruce Woodbury Dr.

### **Mesquite**

Mesq. Med. Associates

1301 Bertha Howe Ave, #1

## Arizona Clinics

### **Lake Havasu City**

1810 Mesquite Ave, #B

### **Bullhead City**

2000 HWY 95, #210

### **Kingman**

Professional Medical Center  
1739 Beverly Ave, #102 &  
#106

## Utah Clinic

### **St. George**

Skyline Building

301 North 200 East, #2C & #2A

### **Cedar City**

166 West 1325 North, #150

# Questions & Answers

These questions were gathered from referring physicians, their office staffs and our patients.

## **1. Do you accept pediatric patients as part of your practice?**

Yes. In fact our practice performs the majority of pediatric neurosurgery in southern Nevada and surrounding communities. Dr. Stuart Kaplan joined our group in 2004 and completed a Pediatric Fellowship at St. Louis Children's Hospital.

## **2. Do you perform spine surgery as well as intracranial procedures?**

Yes, we have one of the busiest and diverse spine practices in southern Nevada. Our physicians not only evaluate acute and degenerative spine conditions, but also perform complex spinal reconstructive procedures in both adults and pediatric patients. Our practice directs the neuro/spine injury program at the only Level 1 Trauma Center in southern Nevada. We also routinely treat tumor and vascular disease within the spinal cord itself.

- 3. At which of the Las Vegas hospitals are your physicians on staff?**  
All of our physicians have privileges at Sunrise, UMC, Desert Springs, Valley, MountainView, Summerlin, Spring Valley, Southern Hills, St. Rose DeLima and Siena Hospitals.
- 4. At which hospitals will your physicians perform surgery?**  
Our physicians perform surgery at Sunrise, UMC, Desert Springs, Valley, MountainView and St. Rose Siena.
- 5. Are any of the physicians on hospital medical staffs outside of Las Vegas?**  
We are also part of the medical staff of Western Arizona Regional Medical Center (Bullhead City, AZ), Kingman Regional Medical Center (Kingman, AZ), Havasu Regional Medical Center (Lake Havasu City, AZ) and Dixie Regional Medical Center (St. George, UT).  
  
Dr. Venger has privileges at Western Arizona Regional Medical Center, Kingman Regional Medical Center, Havasu Regional Medical Center and Dixie Regional Medical Center. Dr. Anson has privileges at Havasu Regional Medical Center in Lake Havasu City, AZ.
- 6. Prior to scheduling an appointment, does one of the physicians need to review any records or radiology reports?**  
The more information our physicians have to review prior to evaluating a patient, the more efficiently we can determine what is necessary to arrive at a correct diagnosis. Generally, we ask that records be sent, if possible, to help facilitate this.
- 7. Do patients need to bring their actual films with them to their scheduled appointment?**  
Yes. Before reaching a decision to recommend surgery, we need to personally review all pertinent radiology studies. For this reason, if patients arrive without their actual films, their appointments may need to be rescheduled.
- 8. Do you accept worker's compensation?**  
Yes. We accept many out-of-state plans including those in Arizona, Utah and California.

**Stuart S. Kaplan, MD**  
**Curriculum Vitae**

**Fellowship**

- St. Louis Children's Hospital, St. Louis, MO
  - Pediatric Fellowship, 2001 – 2002

**Research Fellowships**

- American Heart Association, Harvard Medical School
  - Medical Student Research Fellowship, 1992 – 1993
- Washington University
  - NIH Research Fellowship, 1998 – 2000

### **Residency**

- Washington University Medical Center, St. Louis, MO
  - Residency, Neurological Surgery, 1995 – 2001

### **Internship**

- Washington University Medical Center, St. Louis, MO
  - Internship, Neurological Surgery, 1994 – 1995

### **Medical School**

- Harvard Medical School, Boston, MA
  - Doctorate of Medicine, 1994

### **College**

- Dartmouth College, Hanover, NH
  - B.A. 1989

### **Honors and Awards**

- *Summa cum laude*
- *Phi Beta Kappa*
- High Honors in Anthropology
- Presidential Scholar
- Rufus Choate Scholar
- Academic citations in Anthropology and Physics